

REMARKS

Claims 1-18 and 23-26 are pending in the present application.

Applicants wish to thank Examiner Berman for the helpful and courteous discussion with their undersigned Representative on June 5, 2003. The content of this discussion is believed to be reflected by the remarks set forth herein.

The present invention provides an antimicrobial copolymer obtained by copolymerizing (component I) one or more aliphatically unsaturated monomers, said one or more aliphatically unsaturated monomers functionalized by means of an ester group and at least singly functionalized by means of a tertiary amino group, with (component II) one or more second aliphatically unsaturated monomers, said one or more second aliphatically unsaturated monomers at least singly functionalized by means of an amino group, wherein component I and component II are different (see Claim 1), and a method for preparing the same (see Claim 10). Applicants submit that none of the art of record discloses and/or suggests the presently claimed antimicrobial copolymer or the method for preparing the same. Accordingly, the art of record can not affect the patentability of the claimed invention.

The rejection of Claims 1-5, 10-14, and 19-22 under 35 U.S.C. §102(b) over Ohmae et al is traversed.

Ohmae et al disclose an antimicrobial substance containing 40-95 wt% ethylene and 5-60 wt% dialkylaminoalkyl acrylamide co-monomers (see column 1, line 51 through column 2, line 2). However, as set forth in present claims, the antimicrobial copolymer of the present invention contains the following comonomer groups: (component I) one or more aliphatically unsaturated monomers, said one or more aliphatically unsaturated monomers functionalized

by means of an ester group and at least singly functionalized by means of a tertiary amino group, and (component II) one or more second aliphatically unsaturated monomers, said one or more second aliphatically unsaturated monomers at least singly functionalized by means of an amino group, wherein component I and component II are different.

As is clear from the above, the presently claimed anti-microbial copolymer does not contain an ethylene comonomer unit and, therefore, the presently claimed antimicrobial copolymer is fundamentally different from the copolymer of Ohmae et al. Moreover, Applicants submit that Ohmae et al. fails to disclose or suggest the specifically claimed combination of component I and component II. The standard for determining anticipation requires that the reference “must teach every element of the claim” (MPEP §2131). For the reasons set forth above, Ohmae et al. fails to meet this standard, particularly in view of the fact that Ohmae et al. requires the presence of an ethylene comonomer.

Applicants request withdrawal of this ground of rejection.

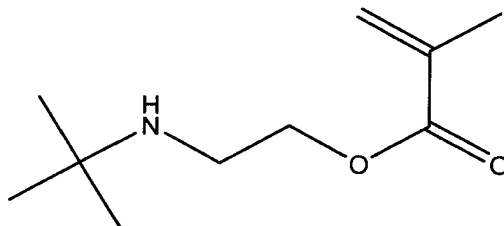
The rejection of Claims 1-18 and 23-26 under 35 U.S.C. §102(b) over EP 0 862 858 is traversed.

EP 0 862 858 discloses an antimicrobial copolymer obtained by copolymerizing tertbutylaminoethyl methacrylate with at least one other aliphatically unsaturated monomer (see Abstract).

As set forth in present claims, the antimicrobial copolymer of the present invention contains the following comonomer groups: (component I) one or more aliphatically unsaturated monomers, said one or more aliphatically unsaturated monomers functionalized by means of an ester group and at least singly functionalized by means of a tertiary amino group, and (component II) one or more second aliphatically unsaturated monomers, said one or more second aliphatically unsaturated monomers at least singly functionalized by means of

an amino group, wherein component I and component II are different. Applicants note that none of the potential comonomers cited in EP 0 862 858 are an aliphatically unsaturated monomer functionalized by an ester group *and* a tertiary amino group, and as such EP 0 862 858 fails to disclose claimed component I.

The Examiner's attention is directed to page 3, lines 11-49, which discusses the copolymerization of tertbutylaminoethyl methacrylate with one or more other aliphatically unsaturated monomer. As can be seen by the following structure of tertbutylaminoethyl methacrylate, this comonomer unit can, at best, qualify as component II since this compound only contains a *secondary* amino group.



Further, Applicants note that the ethylenically unsaturated monomers "B" appearing in EP 0 862 858 at page 3, lines 14-29 and referred to by the Examiner may also only qualify as component II. Accordingly, the failure of EP 0 862 858 to disclose or suggest a comonomer of component I would necessarily make this reference fail to anticipate the present invention.

Withdrawal of this ground of rejection is requested.

The rejection of Claims 1-18 and 23-26 under 35 U.S.C. §103(a) over EP 0 862 858 in view of Ohmae et al is traversed.

EP 0 862 858 and Ohmae et al are discussed above. EP 0 862 858 fails to disclose or suggest component I of the claimed invention, while Ohmae et al includes an ethylene comonomer unit which is not present in the claimed antimicrobial copolymer. As such,

Applicants submit that the combined disclosures of EP 0 862 858 and Ohmae et al can not compensate for the fundamental deficiencies in the respective references. More specifically, Applicants submit that there can be no reasonable motivation to combine these references and to parse together the present invention based on the disclosures of EP 0 862 858 and Ohmae et al, much less an expectation of the advantages obtained thereby. Accordingly, the present invention is not obvious in view of the combined disclosures of EP 0 862 858 and Ohmae et al.

Applicants request withdrawal of this ground of rejection.

The rejection of Claims 1-18 and 23-26 under 35 U.S.C. §103(a) over Ottersbach et al is traversed.

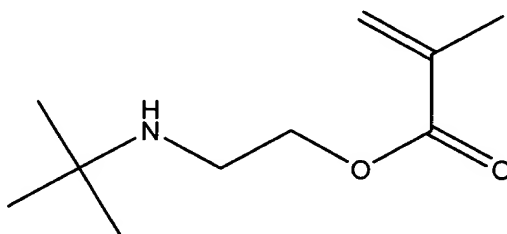
For the same reason as that set forth for EP 0 862 858, Ottersbach et al fails to render the present invention obvious.

Ottersbach et al discloses an antimicrobial copolymer obtained by copolymerizing tertbutylaminoethyl methacrylate with at least one other aliphatically unsaturated monomer (see Abstract).

As set forth in present claims, the antimicrobial copolymer of the present invention contains the following comonomer groups: (component I) one or more aliphatically unsaturated monomers, said one or more aliphatically unsaturated monomers functionalized by means of an ester group and at least singly functionalized by means of a tertiary amino group, and (component II) one or more second aliphatically unsaturated monomers, said one or more second aliphatically unsaturated monomers at least singly functionalized by means of an amino group, wherein component I and component II are different. Applicants note that none of the potential comonomers cited in Ottersbach et al are an aliphatically unsaturated

monomer functionalized by an ester group *and* a tertiary amino group. Therefore, Ottersbach et al fail to disclose claimed component I.

The Examiner's attention is directed to column 2, line 54 to column 3, line 36, which discusses the copolymerization of tertbutylaminoethyl methacrylate with one or more other aliphatically unsaturated monomer. As can be seen by the following structure of tertbutylaminoethyl methacrylate, this comonomer unit can, at best, qualify as component II because this compound only contains a *secondary* amino group.



Further, Applicants note that the ethylenically unsaturated monomers "B" appearing in Ottersbach et al at column 2, line 58 to column 3, line 11 and referred to by the Examiner may also *only* qualify as component II. Therefore, Ottersbach et al do not disclose or suggest a comonomer of component I.

Citing In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974), MPEP §2143.03 states: "To establish a prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." Applicants submit that by the failure of Ottersbach et al to disclose or suggest component I or the attendant advantages flowing from the present invention, this reference would fail to meet this requirement, and as the present invention is not obvious in view of Ottersbach et al.

Withdrawal of this ground of rejection is requested.

Applicants respectfully request that the obviousness-type double patenting rejections over U.S. 5,967,714, U.S. Application No. 09/926,470, U.S. Application No. 09/926,471,

U.S. Application No. 09/926,507, U.S. Application No. 09/926,508, U.S. Application No. 09/926,510, U.S. Application No. 10/070,813, U.S. Application No. 10/070,817, and U.S. Application No. 10/069,562, be held in abeyance until an indication of allowable subject matter in the present application. If necessary, a terminal disclaimer and/or Declaration will be filed at that time. Until such a time, Applicants make no statement with respect to the propriety of these grounds of rejection.

Applicants note that all of the presently pending claims have been fully searched on the merits and no amendments have been made in response to the outstanding Office Action. Therefore, any new ground of rejection cannot be reasonably considered to have been necessitated by Applicants' amendment. Accordingly, it is expected that any new ground of rejection would be in a new non-final Office Action.

Applicants submit that the present application is now in condition for allowance.

Early notification of such action is earnestly solicited.

Respectfully submitted,

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